



## AVERAGE WEEKLY EARNINGS, AUSTRALIA, DECEMBER QUARTER 1981 (PRELIMINARY)

**PHONE INQUIRIES** *for more information about these statistics*—contact Mr Allan Nicholls on Canberra (062) 52 6573 or any of our State offices.

*other inquiries including copies of publications*—contact Information Services on Canberra (062) 52 6627 or in any of our State offices.

**MAIL INQUIRIES** *write to* Information Services, ABS, P.O. Box 10, Belconnen, A.C.T. 2616 or any of our State offices.

### MAIN FEATURES

**IMPORTANT NOTE.** *This is the first publication of a new series of estimates compiled from a survey of employers. Estimates based on payroll tax and other returns will no longer be compiled. See paragraph 2*

Estimated average weekly earnings for December quarter 1981, in the pay period ending on or before 23 October, for all employees were \$303.20 for males, \$197.00 for females, and \$263.90 for persons; the respective changes from September quarter 1981 were 5.8 per cent, 1.2 per cent, and 4.6 per cent.

The estimate of average weekly ordinary time earnings for full-time adults and the respective quarterly changes are shown below:

<i>Full-time adults</i>	<i>Average weekly ordinary time earnings (\$)</i>	<i>Change from previous quarter (%)</i>
<b>Males</b>	<b>302.90</b>	<b>5.5</b>
<b>Females</b>	<b>241.60</b>	<b>2.9</b>
<b>Persons</b>	<b>285.20</b>	<b>5.1</b>

### EXPLANATORY NOTES

#### Introduction

This publication contains preliminary results of a quarterly sample survey which was introduced in September quarter 1981. The survey is designed to obtain from employers information on earnings in respect of a specified pay week each quarter, and replaces the average weekly earnings series based principally on information from payroll tax returns.

2. Background information on the reasons for the change from the payroll tax data to a direct collection is given in *Information Paper: Review of ABS Employment Statistics* (6239.0) published on 8 July 1981. A summary of the main differences in concepts, methods and coverage of the old and new earnings series is given in a further publication, *Information paper: Average Weekly Earnings—New Series to Replace Former Payroll Tax Based Series* (6336.0), issued 24 March 1982. Copies of these publications have been sent to all organisations and individuals on the mailing list for the old *Average Weekly Earnings* series (6302.0) and further copies are available on request.

#### Scope of the Survey

3. All wage and salary earners who received pay in respect of the reference period were represented in the survey, except:

- (a) members of the Australian permanent defence forces
- (b) employees of establishments primarily engaged in agriculture
- (c) employees in private households employing staff
- (d) waterside workers employed on a casual basis
- (e) employees on workers' compensation
- (f) employees based outside Australia.

4. Hospitals and religious and benevolent institutions were represented but any handicapped workers, who were engaged mainly for their own welfare and where records of payment were not readily available, were excluded.

#### Survey design

5. A sample of employers listed on the ABS central register of businesses was selected to ensure adequate State and industry representation. Industry was determined at the establishment level and all establishments of an enterprise within a State classified to a common industry were treated as a single composite unit. These industry units were then stratified by size before the sample was selected. The numbers of units in some of the categories (or 'cells') defined by the cross-classification of State, industry and size are too small for it to be possible to select an adequately representative sample; in such cases all employer units in the cell were included in the survey. In all other cells, the sample was chosen by random selection. Some 3,600 employers are included in the sample.

6. As a result of the structuring of the sample by industry of establishment, some enterprises within a State may comprise more than one industry unit for survey purposes. In cases of this kind, separate returns have been sought for each of the industry units selected in the survey.

7. Some employers, particularly those involved in newly established businesses, may not have been included on the ABS register of employers from which the survey samples are drawn. The numbers of such units, however are relatively small and generally they would have only few employees, so that their omission is likely to have negligible effect on the averages derived from the surveys.



### Reliability of the estimates

8. Since the estimates are based on information obtained from a sample of employers they are subject to sampling variability; that is, they may differ by chance from the figures that would have been produced if all employers had been included in the survey. The extent of the detail published has been determined after considering estimated measures of sampling variability.

9. One measure of the sampling variability is given by the *standard error*. There are about two chances in three that a sample estimate will differ by less than one standard error from the figure that would have been obtained, had all employers been included, and about nineteen chances in twenty that the difference will be less than two standard errors.

10. Another measure of the sampling error is the *relative standard error*, which is obtained by expressing the standard error as a percentage of the estimate. Estimated relative standard errors for December quarter *average weekly earnings* estimates and for estimates of *quarterly change* are shown in Table 1.

11. The imprecision due to sampling variability, which is measured by the standard error, should not be confused with inaccuracies that may occur because of imperfections in reporting by respondents. Inaccuracies of this kind are referred to as the *non-sampling error*, and they may occur in any enumeration, whether it be a full count or a sample. Efforts are made to reduce the non-sampling error by careful design of questionnaire and detailed checking of completed returns.

### Comparability of results

12. The new series differs in several important ways from the payroll tax based series which it replaces. In particular, data on male and female, ordinary and overtime earnings are obtained directly from a sample survey of employers drawn from an ABS register of economic units which is more complete than the coverage provided by employers subject to payroll tax. A more detailed description of the changes resulting from the introduction of the new quarterly survey of employers is provided in the Information Paper (6336.0) referred to above.

13. Because of the differences in coverage, concepts and methods between the old and new series it is difficult to make direct comparisons. Average weekly earnings for September quarter 1981 for both the old and new series is given in Table 2. For users who wish to obtain movements in earnings for a period which takes in both the old and the new series, a table has been included which shows quarter to quarter movement in the old and new series, linked to a common index base.

14. The December quarter survey included additional questions to cover hours paid for and to obtain more detailed dissections of earnings for specific categories of employee. It will thus resemble in many ways the survey of earnings and hours usually conducted in October, but

which has now been discontinued. Some significant differences will remain, particularly in coverage of the sample frameworks. Caution should therefore be used in making comparisons between the results of the December quarter 1981 survey and the October earnings and hours surveys of earlier years.

### Definitions

15. *Reference period* refers to the last pay-period ending on or before a specified date. For September quarter the date was 14 August 1981 and for December quarter, 23 October 1981. If the operations of the establishment(s) covered by the return were seriously curtailed by an industrial dispute, breakdown, fire, etc., during the reference period, particulars for the previous normal pay-period were obtained.

16. *Full-time employees* are those who work the agreed or award hours for a full-time employee in their occupation and who received pay for any part of the reference period; if agreed or award hours do not apply, employees are regarded as full-time if they ordinarily work 30 hours or more a week. *Full-time* employees temporarily on short-time, or who began or ceased work during the reference period, are included. Some employees, who were paid for a weekly attendance of less than 30 hours (e.g. aircrews, teachers, university lecturers), are classified as full-time if they worked the normal scheduled hours for a full-time week.

17. *Adults* are employees 21 years of age or over and those employees who are under 21 years of age but are paid at the full adult rate for their occupation.

18. *Weekly total earnings* refers to earnings of employees in the reference period, before taxation and any other deductions, e.g. superannuation, board and lodging, have been made. Earnings comprise overtime earnings, ordinary time earnings, shift allowances, penalty rates, commission and similar payments, and that part of paid annual leave, paid sick leave, long service leave and paid holidays taken during the reference period. Retrospective pay or pay in advance, annual leave loadings and other bonuses not related to the reference period are excluded.

19. *Weekly overtime earnings* refers to that part of *weekly total earnings* for hours paid for in excess of award, standard or agreed hours of work.

20. *Weekly ordinary time earnings* refers to that part of *weekly total earnings* attributable to award, standard or agreed hours of work. Included in relation to these hours are shift allowances, penalty rates, commissions, bonuses and incentive payments, and one week's proportion of payments for annual and other leave taken during the specified pay-period.

### Related publications

21. Users may also wish to refer to the following publications which are available on request:

*Earnings and Hours of Employees, Australia, October 1980* (6304.0), conducted for many years until 1980; now discontinued.



*Earnings and Hours of Employees, Distribution and Composition, Australia, May 1981 (Preliminary) (6305.0), and the final publication (6306.0)—sample survey conducted annually in May, but not to be conducted in 1982.*

*Weekly Earnings of Employees (Distribution), Australia, August 1981 (Preliminary) (6309.0) and final publication (6310.0), containing results of household interview surveys conducted annually in August.*

*Income Distribution, Australia, 1978-79:*

*Individuals (Preliminary) (6501.0) and final (6502.0);  
Income Units (Preliminary) (6522.0);  
Families (Preliminary) (6506.0)*

*Wage Rate Indexes, Australia (Preliminary) (6311.0) and  
Wages Rates, Australia (6312.0)—issued monthly.*

22. Current publications produced by the ABS are listed in the *Catalogue of Publications, Australia* (1101.0). The ABS also issues, on Tuesdays and Fridays, a *Publications Advice* (1105.0) which lists publications to be released in the next few days. The Catalogue and Publications Advice are available from any ABS office.

#### Symbols and other usages

... not applicable

NOTE: The estimates of average weekly earnings are rounded to the nearest 10 cents.

TABLE 1. AVERAGE WEEKLY EARNINGS OF EMPLOYEES, AUSTRALIA

Quarter	Survey reference date	MALES			FEMALES			PERSONS		
		Full-time adults		All males	Full-time adults		All females	Full-time adults		All employees
		Weekly ordinary time earnings	Weekly total earnings		Weekly ordinary time earnings	Weekly total earnings		Weekly ordinary time earnings	Weekly total earnings	
		Weekly ordinary time earnings	Weekly total earnings	Weekly total earnings	Weekly ordinary time earnings	Weekly total earnings	Weekly total earnings	Weekly ordinary time earnings	Weekly total earnings	Weekly total earnings
—dollars—										
1981—										
September	14 Aug.	287.20	311.20	286.60	234.80	240.90	194.70	271.40	289.90	252.20
December	23 Oct.	302.90	331.20	303.20	241.60	248.30	197.00	285.20	307.10	263.90
—per cent—										
Quarterly change		5.5	6.4	5.8	2.9	3.1	1.2	5.1	5.9	4.6
Relative standard errors(a)—										
December quarter		0.6	0.8	0.8	0.6	0.6	0.8	0.5	0.6	0.7
Quarterly change		0.6	0.8	0.8	0.8	0.9	1.1	0.6	0.7	0.8

(a) See paragraphs 9 and 10 of the Explanatory notes.



TABLE 2. AVERAGE WEEKLY EARNINGS AND INDEX NUMBERS OF EARNINGS:  
OLD AND NEW SERIES (SEPTEMBER QUARTER 1981 = 100), AUSTRALIA

Quarter	Weekly total earnings			
	Per employed male unit		All male employees	
	Seasonally adjusted			
	Old series		New series	
	\$	Index	\$	Index
1976—				
March	170.10	56.5	..	..
June	179.40	59.6	..	..
September	184.60	61.3	..	..
December	188.10	62.5	..	..
1977—				
March	191.50	63.6	..	..
June	199.10	66.1	..	..
September	202.40	67.2	..	..
December	206.90	68.7	..	..
1978—				
March	211.40	70.2	..	..
June	216.00	71.7	..	..
September	220.90	73.4	..	..
December	222.20	73.8	..	..
1979—				
March	230.40	76.5	..	..
June	230.90	76.7	..	..
September	239.10	79.4	..	..
December	244.30	81.1	..	..
1980—				
March	250.90	83.3	..	..
June	258.60	85.9	..	..
September	270.20	89.7	..	..
December	278.10	92.4	..	..
1981—				
March	283.90	94.3	..	..
June	294.30	97.7	..	..
September	301.10	100.0	286.60	100.0
December	..	..	303.20	105.8

**A method of calculating an approximation of the New Series for quarters earlier than September 1981.**

For reasons outlined both in the Explanatory notes (paragraph 12) and the more detailed exposition given in Information paper (6336.0) the old and new series are not strictly comparable.

The following information is supplied to assist those users who need to calculate an approximate equivalent to the new series for quarters earlier than September 1981.

**Method of calculating the Average Weekly Earnings All Male Employees for June 1981:**

1. Average Weekly Earnings (\$) All Male Employees September 1981 (New Series)	286.60
2. Index numbers of old series: <u>June 1981</u>	<u>97.7</u>
September 1981	100
3. June 1981 equivalent of Average Weekly Earnings for All Male Employees. (1 x 2)	280.00

Because of the quite different conceptual and methodological bases of the two series and the fact that the link is only available for the September 1981 quarter, extreme care needs to be undertaken in interpreting the earnings figure so derived.